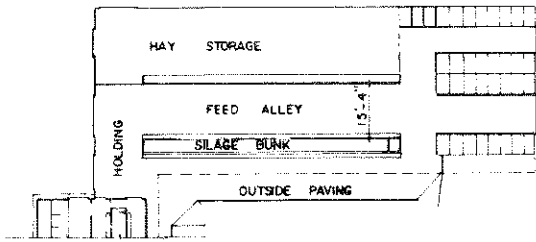
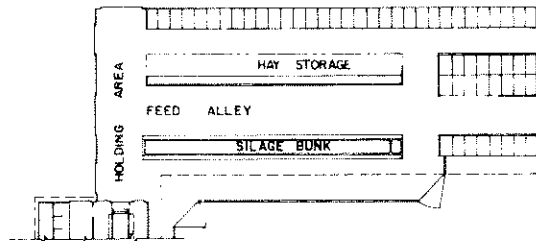


DEVELOPMENT STAGES



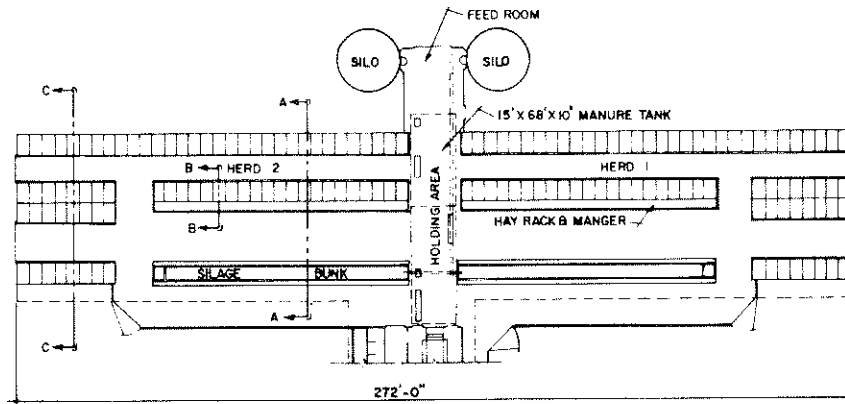
PHASE 1 - 35 STALLS

PRIMARY HAY FEEDING.



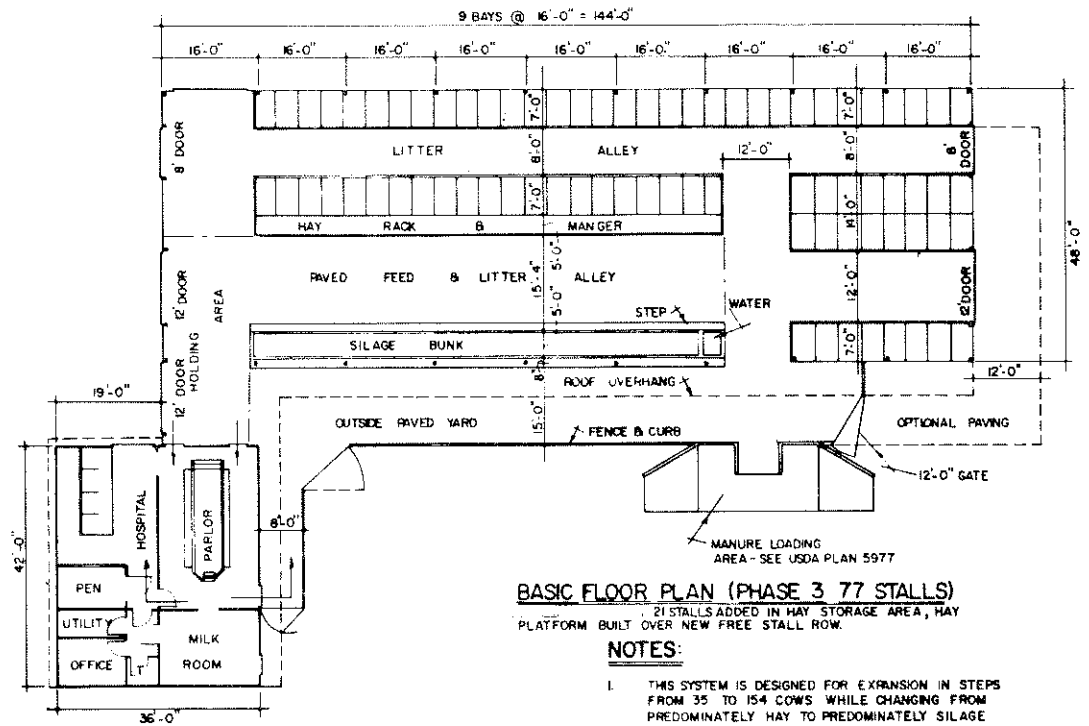
PHASE 2 - 56 STALLS

21 STALLS AND ALLEY ADDED IN HAY STORAGE AREA



PHASE 4 - 154 STALLS

SYSTEM CAN BE DOUBLED IN SIZE AT ANY PHASE, DOUBLING ALLOWS HERD DIVISION, FEED ROOM & SILOS ADDED.



BASIC FLOOR PLAN (PHASE 3 77 STALLS)

21 STALLS ADDED IN HAY STORAGE AREA, HAY PLATFORM BUILT OVER NEW FREE STALL ROW.

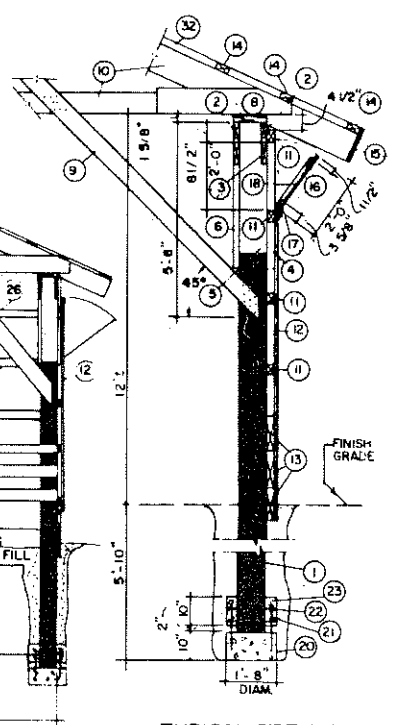
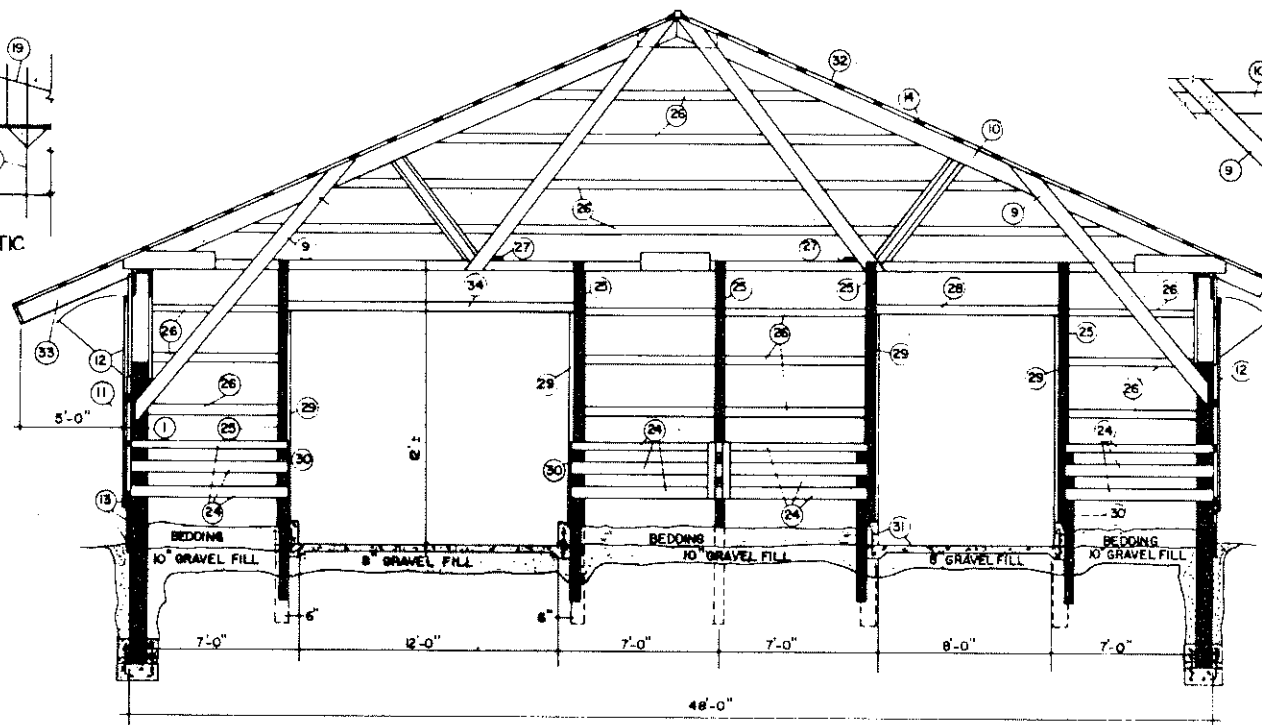
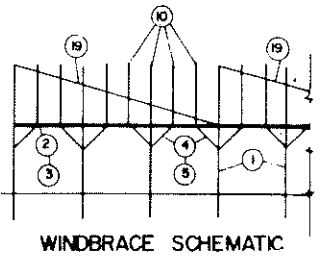
NOTES:

1. THIS SYSTEM IS DESIGNED FOR EXPANSION IN STEPS FROM 35 TO 154 COWS WHILE CHANGING FROM PREDOMINATELY HAY TO PREDOMINATELY SILAGE FORMS OF FEED.
2. FEED ALLEY WIDTH ADEQUATE TO ALLOW FEEDING WITH SELF-UNLOADING WAGONS AND HAY TRUCKS.
3. BUILDING SHOULD BE ORIENTED TO SOUTH.
4. CONTINUOUS RIDGE VENTILATOR RECOMMENDED.
5. ALL CONCRETE SHOULD BE AIR-ENTRAINED, 4-6% AIR BY VOLUME.

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PARTIALLY OPEN FREE STALL HOUSING SYSTEM-35 TO 154 COWS

MASS. '67 EX. 6023 SHEET 1 OF 4

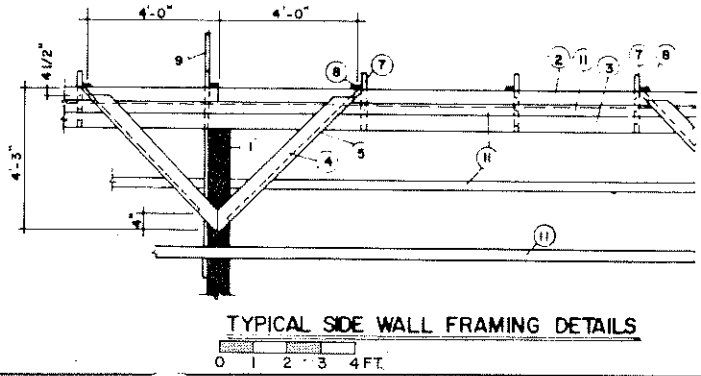
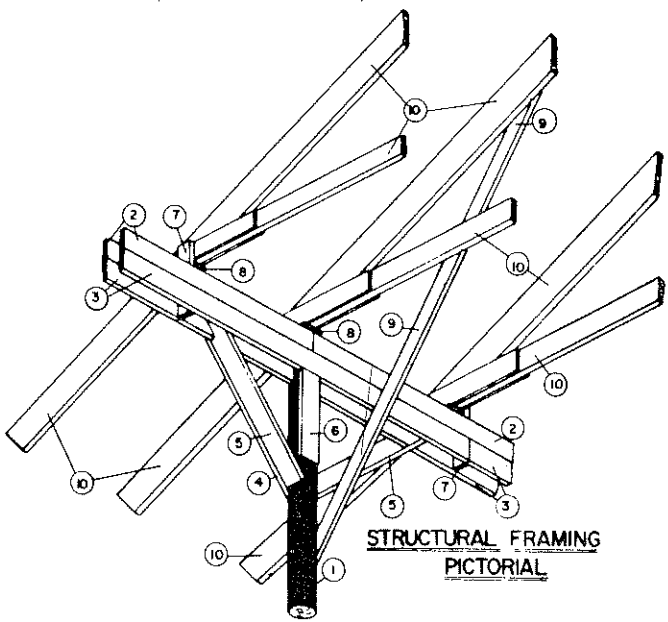


SECTION C-C THROUGH STALL AREA
0 2 4 6 FT.

TYPICAL SIDE WALL SECTION
0 1 2 3 4 FT.

NOTES: & SPECIFICATIONS

- | | | |
|--|--|---|
| <p>1. 7" TOP DIAMETER X 17' PRESSURE TREATED POLE, 16'-0" O.C.</p> <p>2. 2" X 6" X 16" PLATE (LET OUTSIDE PLATES INTO POLE FACE)</p> <p>3. 2" X 10" X 16" PLATE</p> <p>4. 2" X 6" X 5'-7" KNEE BRACE MEMBER</p> <p>5. 2" X 8" X 5'-5" KNEE BRACE MEMBER NOTCHED INTO POLE & CUT TO FIT BETWEEN PLATES.</p> <p>6. 2" X 6" X 3'-0" SCAB</p> <p>7. 2" X 6" X 1'-9" TRUSS TIE DOWN, 4' O.C.</p> <p>8. 2" X 4" X 9" TRUSS SEAT, 4' O.C.</p> <p>9. 2" X 6" X 15'-6" WIND BRACE 16' O.C.</p> <p>10. 48" TRUSS SEE DETAIL, SHEET 4</p> | <p>11. 2" X 4" GIRTS, 2'-0" O.C.</p> <p>12. PLYWOOD (EXTERIOR TYPE) OR VERTICAL BOARD SIDING</p> <p>13. 2" X 12" X 16" PRESSURE TREATED PLANK</p> <p>14. 2" X 4" X 12" PURLIN 2'-0" O.C.</p> <p>15. 1" X 12" FASCIA</p> <p>16. 1" X 4" DROP-DOWN WINDOW FRAMING STRAP HINGE.</p> <p>17. 2" WIDE FIBERGLASS PANEL WINDOW</p> <p>18. WINDBRACE, 2" X 6" NAILED TO UNDER-SIDE OF TRUSS UPPER CHORDS.</p> <p>19. 20" DIAM X 10" THICK CONCRETE FOOTING AT EACH STRUCTURAL POLE</p> | <p>21. #3 (3/8") REINFORCING ROD, 1'-3" LONG.</p> <p>22. 60# NAILS (8 PER POLE) STAGGERED & DRIVEN 2 1/2" INTO POLE</p> <p>23. CONCRETE TO BE POURED AFTER POLE IS SET</p> <p>24. FREE STALL PARTITION PLANK</p> <p>25. 4" TOP DIAM. X 16" PRESSURE TREATED END WALL POLE</p> <p>26. 2" X 4" END WALL GIRT 2'-0" O.C.</p> <p>27. 2" X 6" WINDBRACE.</p> <p>28. 2-2" X 6" X 9'-0" DOOR HEADER</p> <p>29. 2" X 6" DOOR FRAME</p> <p>30. 4" TOP DIAM. X 7' PRESSURE TREATED STALL POST</p> <p>31. CONCRETE CURB & ALLEY FLOOR</p> <p>32. METAL ROOFING 2 1/2" CORR.</p> <p>33. 5" OVERHANG - SCAB 2" X 10" ONTO TRUSS UPPER CHORD.</p> <p>34. 2-2" X 6" X 13'-0" DOOR HEADER</p> |
|--|--|---|

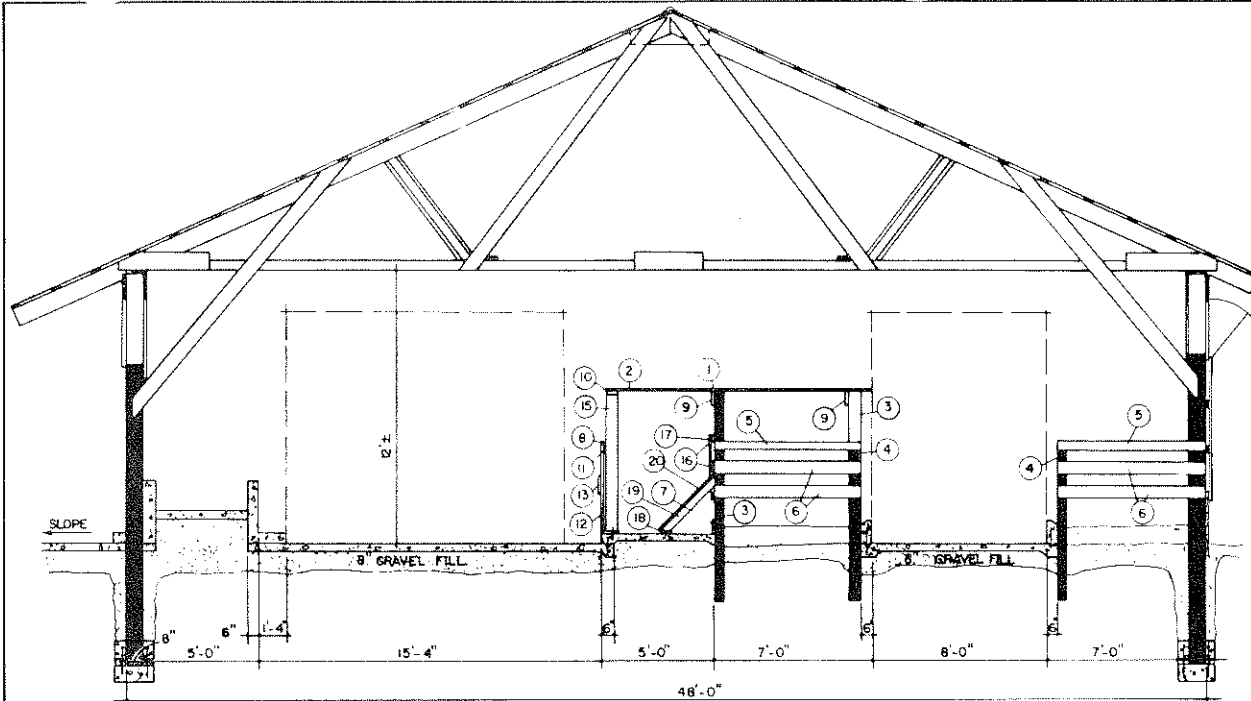


0 1 2 3 4 FT.

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MASS. '67 EX. 6023 SHEET 2 OF 4

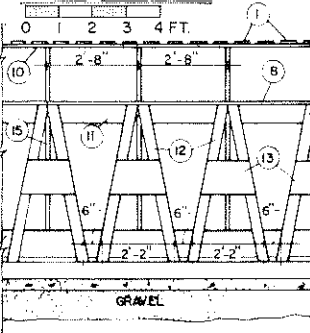


SECTION A-A

0 2 4 6 FT.

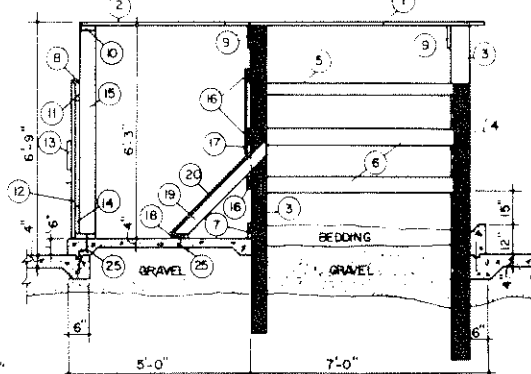
HAY RACK & BALE PLATFORM DETAILS

FRONT ELEVATION



CROSS SECTION B-B

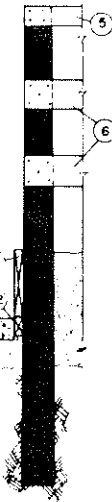
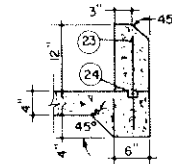
SCALE 3/8" = 1'-0"



NOTES:

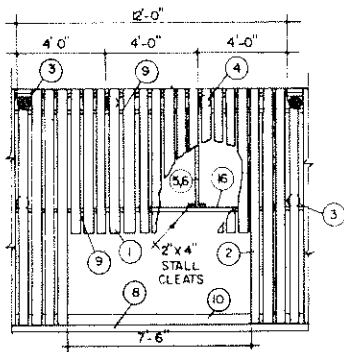
- | | | | |
|----|-------------------------|----|--|
| 1 | 2" X 6" X 8'-0" | 13 | 1" X 2" X 1'-8" |
| 2 | 2" X 6" X 12'-0" | 14 | 2" X 6" X 12'-0" |
| 3 | 4" TOP DIAMETER X 9'-0" | 15 | 2" X 6" X 6'-3" 2'-8" O.C. |
| 4 | 4" TOP DIAMETER X 7'-0" | 16 | 2" X 4" X 12'-0" |
| 5 | 2" X 4" X 6'-6" | 17 | 1" BOARDS OR 1/2" EXTERIOR PLYWOOD TREATED POLE. |
| 6 | 2" X 6" X 6'-6" | 18 | 2" X 4" X 8'-0" |
| 7 | 2" X 8" X 12'-0" | 19 | 2" X 4" X 4'-0" |
| 8 | 2" X 4" X 8'-0" | 20 | 1" BOARDS OR 1/2" EXTERIOR PLYWOOD. |
| 9 | 2" X 6" X 12'-0" | 21 | 2" X 12" X 12'-0" PRESSURE TREATED |
| 10 | 2" X 6" X 8'-0" | 22 | 2" X 4" X 8'-0" J PLANK |
| 11 | 2" X 6" X 12'-0" | 23 | 3" X 16" REINFORCING ROD 12'-0" O.C. |
| 12 | 2" X 4" X 4'-9" | 24 | 1" X 2" KEY, FORMED WITH DILED 1" X 2" |
| | | 25 | 1/2" ANCHOR BOLT, 4' O.C. |

CONCRETE CURB DETAIL
SCALE 3/4" = 1'-0"



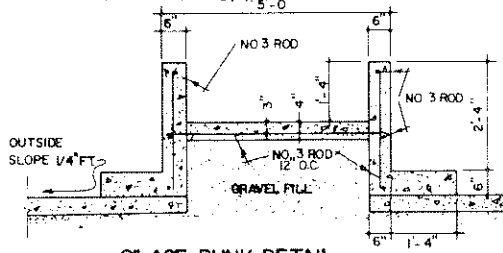
ALTERNATE CURB - POST DESIGNS

0 2 FT.



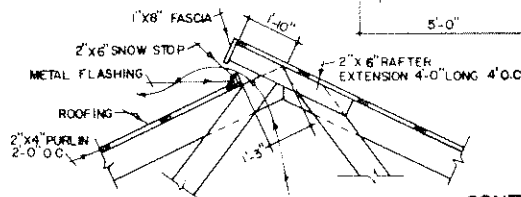
PARTIAL PLAN

0 2 4 6 FT. 5'-0"



SILAGE BUNK DETAIL

0 2 3 FT.



CONTINUOUS RIDGE VENTILATOR

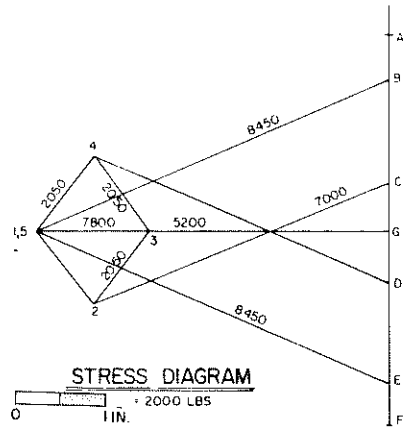
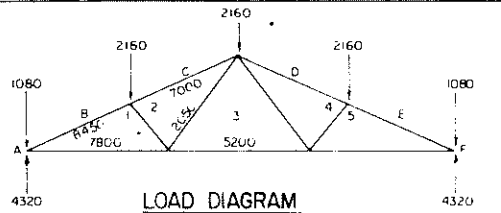
(OPEN TO SOUTH)

0 1 2 3 4 FT.

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HOUSING SYSTEM-35 TO 154 COWS**

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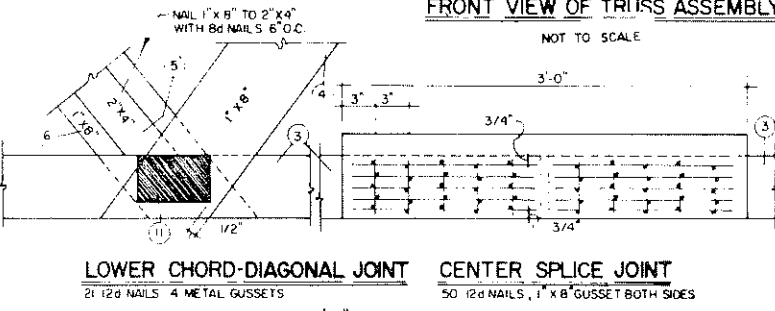
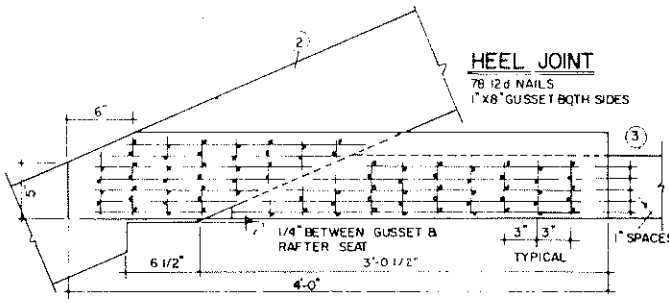
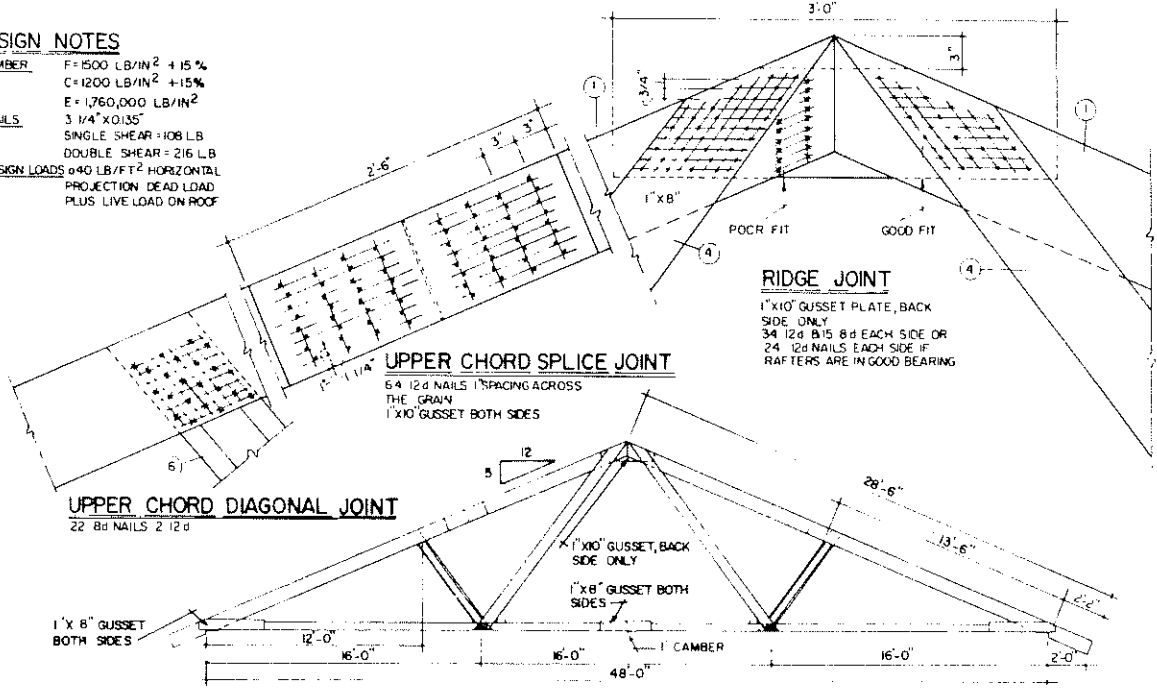


DESIGN NOTES

1 LUMBER F=1500 LB/IN² +15%
C=1200 LB/IN² +15%
E=1,760,000 LB/IN²

2 NAILS 3 1/4" X 0.135"
SINGLE SHEAR = 108 LB
DOUBLE SHEAR = 216 LB

3 DESIGN LOADS 0.40 LB/FT² HORIZONTAL
PROJECTION DEAD LOAD
PLUS LIVE LOAD ON ROOF



NOTES & SPECIFICATIONS

- LUMBER CONSTRUCTION GRADE DOUGLAS FIR OR EQUIVALENT.
- TRUSSES SPACED 4'-0" ON CENTERS.
- CAMBER 1" AT CENTER SPLICE.
- NAILS USE HARDENED, HELICALLY THREADED NAILS.
- DRIVE ALL NAILS FROM THE FRONT EXCEPT THOSE SHOWN AS A.
- MAKE AND USE A NAILING TEMPLATE FOR LOCATING ALL NAILS.
- MINIMUM END GRAIN NAIL SPACING, ALL MEMBERS 2 1/2"-3".
- MINIMUM EDGE GRAIN NAIL SPACING, ALL MEMBERS 3/4"-1".

JOINT DETAILS: SCALE 1 1/2" = 1'-0"
MEMBER DETAILS: NOT TO SCALE

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MASS. '67 EX. 6 0 2 3 SHEET 4 OF 4

